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~~creating said structured document having the contents of said document instance in said one logical structure that is defined by said corresponding validated element declaration.~~

REMARKS

In the Final Office Action mailed July 24, 2002, claims 1-13 were rejected under 35 USC 102(e) as being anticipated by Sato (U.S. Patent No. 6,014,680). The foregoing rejections are respectfully traversed.

The Examiner is respectfully requested to acknowledge the claim for the benefit of priority under 35 U.S.C. 119 and receipt of the certified copy of the priority document, Japanese Patent Application No. 11-141174 (filed May 21, 1999 in Japan).

In response to the subject action, claims 1, 9, and 13 are amended. Care has been exercised to avoid introduction of new matter.

Claims 1-13 are pending in the present application; claims 1, 9, and 13 are independent claims. Claims 2-8 depend, either directly or indirectly, from claim 1, and claims 10-12 depend, either directly or indirectly, from claim 9.

Amended claims 1, 9, and 13 recite that, the structured document has a document instance and a document type definition, and the document type definition includes (i) a plurality of element declarations which respectively define a plurality of type of logical structures for the one document instance, and (ii) a plurality of entity declarations which respectively designate the defined logical structures.

More particularly, each of amended claims 1, 9 and 13 recites (using the recitation of claim 1 as an example) "preparing at least one document instance which presents a contents of said structured document, and a document type definition which defines a document structure of said structured document, including a plurality of element declarations which respectively define a plurality of types of logical structures for said one document instance, and a plurality of entity declarations which respectively designate said defined logical structures".

In contrast to the present invention, Sato et al. discloses a DTD (Document Type Definition) including a plurality of elements which have the same type of structure ("#PCDATA") as each other.

Sato et al. is silent about the features of the present invention including the document

type definition which includes a plurality of element declarations which respectively define a plurality of type of logical structures for the one document instance, and a plurality of entity declarations which respectively designate the defined logical structures.

The Sato apparatus prepares a DTD and a corresponding keyword in advance, and these elements are to be used to convert a non-structured document into a structured document. Moreover, the object of Sato et al. is to structuralize a non-structured document into a structured document by relating the non-structured document to the keyword. Specifically, Sato et al. discloses a method for allocating one or more structured elements to a word in the non-structured document.

In contrast to Sato, the present invention describes a structured document in a single DTD so that the structured document can be defined in terms of a plurality of structures. Sato et al. does discuss or suggest the above-mentioned object and solution of the present invention.

The Examiner is respectfully requested to reconsider whether Sato et al. discloses the following features of the present invention, which the Examiner asserts are disclosed by Sato et al. as follows:

- (1) "preparing a document instance ..." at Fig. 1-4, col. 8, lines 10-15 and lines 24-64;
- (2) "validating one of said entity declarations ..." at Fig. 1, 7-9, col. 9, lines 19-65;
- (3) "Creating said structured document ..." at Fig. 5, 16 & 17, col. 8, lines 24-64, and col. 14, lines 1-46.

Rather than disclosing the foregoing features, Sato et al. discloses extracting one or more keywords from a non-structural document and then relating each of the extracted keywords to a predetermined DTD, at the index (1). Sato et al. is silent about the plural elements defining plural type of logical structures.

In contrast to Sato, in the present invention, one document instance has a plurality of types of logical structures using a document type definition (DTD). Therefore, one document instance, which is defined in terms of one DTD, can be used for multiple purposes, for example being printed and being stored in database or so.

Sato et al. merely discloses extracting one or more keywords, at the index (2). On the other hand, the present invention can be realized without Sato et al.'s keyword extracting method. Further, in the present invention, one DTD includes a plural of types of logical structures each of which is defined according to the purpose of use of the document instance.

Sato et al. discloses a process in the case that the DTD difference data exists and process of modifying the document instance, at the index (3).

Therefore, the subject matter of amended claims 1, 9, and 13 of the present application is not discussed or suggested by Sato et al.

Claims 2-8 and 10-12 recite additional, patentably distinguishing features of their own. For example, claim 2/1 recites "for each of the plurality of entity declarations, control information indicating whether the entity declaration is valid or invalid is additionally described".

Withdrawal of the foregoing rejections is respectfully requested.

The Examiner is respectfully requested to enter the foregoing amendments after final because same clarify the patentably distinguishing features of the present invention over Sato et al.


If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE CLAIMS:**

Please AMEND the following claims:

1. (TWICE AMENDED) A structured document creation method for creating a structured document in accordance with a predetermined document type definition, comprising :

preparing [a] at least one document instance which presents a contents of said structured document, and a document type definition which defines a document structure of said structured document, including a plurality of element declarations which respectively define a plurality of types of logical structures [and] for said one document instance, and a plurality of entity declarations which respectively designate said defined logical structures;

validating one of said entity declarations of said document type definition to validate a corresponding one of said element declarations of said document type definition; and

creating said structured document having the contents of said document instance in said one logical structure that is defined by said corresponding validated element declaration.

9. (TWICE AMENDED) A computer-readable recording medium on which a structured document created in accordance with a predetermined document type definition is recorded[;], said medium comprising:

the structured document being recorded in a data file formed on said recording medium;

the data file at least having a region in which the document type definition which defines a document structure of said structured document is recorded and another region in which [a] at least one document instance which presents contents of the document are recorded;

a plurality of element declarations which respectively define a plurality of types of logical structures for said one document instance, and a plurality of entity declarations which respectively designate said defined logical structures being described in said region in which the document type definition is recorded;

for each of the plurality of entity declarations, information which indicates whether the entity declaration is valid or invalid being additionally described.

13. (ONCE AMENDED) A computer-readable medium storing a program which, [en] when executed by a computer, causes the computer to execute functions of a structured

document creation method for creating a structured document in accordance with a predetermined document type definition, comprising:

preparing [a] at least one document instance which presents a contents of said structured document, and a document type definition which defines a document structure of said structured document, including a plurality of element declarations which respectively define a plurality of types of logical structures [and] for said one document instance, and a plurality of entity declarations which respectively designate said defined logical structures;

validating one of said entity declarations of said document type definition to validate a corresponding one of said element declarations of said document type definition; and

creating said structured document having the contents of said document instance in said one logical structure that is defined by said corresponding validated element declaration.